

SEQUENCE LISTING

<110> ITO, Yasuaki
FUJII, Ryo
HINUMA, Shuji
FUKUSUMI, Shoji
MARUYAMA, Minoru

<120> Novel Screening Method

<130> 3136 USOP

<140> US 10/542408

<141> 2005-07-15

<150> PCT/JF2004/000248

<151> 2004-01-15

<150> JP 2003-010001

<151> 2003-01-17

<150> JP 2003-104540

<151> 2003-04-08

<150> JP 2003-194497

<151> 2003-07-09

<150> JP 2003-329080

<151> 2003-09-19

<160> 22

<210> 1

<211> 361

<212> PRT

<213> Homo sapiens

<400> 1

```
Met Ser Pro Glu Cys Ala Arg Ala Ala Gly Asp Ala Pro Leu Arg Ser
              5              10              15
Leu Glu Gln Ala Asn Arg Thr Arg Phe Pro Phe Phe Ser Asp Val Lys
              20              25              30
Gly Asp His Arg Leu Val Leu Ala Ala Val Glu Thr Thr Val Leu Val
              35              40              45
Leu Ile Phe Ala Val Ser Leu Leu Gly Asn Val Cys Ala Leu Val Leu
              50              55              60
Val Ala Arg Arg Arg Arg Gly Ala Thr Ala Cys Leu Val Leu Asn
              65              70              75              80
Leu Phe Cys Ala Asp Leu Leu Phe Ile Ser Ala Ile Pro Leu Val Leu
              85              90              95
Ala Val Arg Trp Thr Glu Ala Trp Leu Leu Gly Pro Val Ala Cys His
              100              105              110
Leu Leu Phe Tyr Val Met Thr Leu Ser Gly Ser Val Thr Ile Leu Thr
              115              120              125
Leu Ala Ala Val Ser Leu Glu Arg Met Val Cys Ile Val His Leu Gln
              130              135              140
Arg Gly Val Arg Gly Pro Gly Arg Arg Ala Arg Ala Val Leu Leu Ala
```

145 150 155 160
 Leu Ile Trp Gly Tyr Ser Ala Val Ala Ala Leu Pro Leu Cys Val Phe
 165 170 175
 Phe Arg Val Val Pro Gln Arg Leu Pro Gly Ala Asp Gln Glu Ile Ser
 180 185 190
 Ile Cys Thr Leu Ile Trp Pro Thr Ile Pro Gly Glu Ile Ser Trp Asp
 195 200 205
 Val Ser Phe Val Thr Leu Asn Phe Leu Val Pro Gly Leu Val Ile Val
 210 215 220
 Ile Ser Tyr Ser Lys Ile Leu Gln Ile Thr Lys Ala Ser Arg Lys Arg
 225 230 235 240
 Leu Thr Val Ser Leu Ala Tyr Ser Glu Ser His Gln Ile Arg Val Ser
 245 250 255
 Gln Gln Asp Phe Arg Leu Phe Arg Thr Leu Phe Leu Leu Met Val Ser
 260 265 270
 Phe Phe Ile Met Trp Ser Pro Ile Ile Ile Thr Ile Leu Leu Ile Leu
 275 280 285
 Ile Gln Asn Phe Lys Gln Asp Leu Val Ile Trp Pro Ser Leu Phe Phe
 290 295 300
 Trp Val Val Ala Phe Thr Phe Ala Asn Ser Ala Leu Asn Pro Ile Leu
 305 310 315 320
 Tyr Asn Met Thr Leu Cys Arg Asn Glu Trp Lys Lys Ile Phe Cys Cys
 325 330 335
 Phe Trp Phe Pro Glu Lys Gly Ala Ile Leu Thr Asp Thr Ser Val Lys
 340 345 350
 Arg Asn Asp Leu Ser Ile Ile Ser Gly
 355 360

<210> 2
 <211> 1083
 <212> DNA
 <213> Homo sapiens

<400> 2
 atgtcccttg aatgcgcgcg ggcagcgggc gacgcgccct tgcgcagcct ggagcaagcc 60
 aaccgcaccc gctttccctt cttctccgac gtcaaggcgc accaccggct ggtgctggcc 120
 gcggtggaga caaccgtgct ggtgctcact ttgtcagtg cgtgctggg caacgtgtgc 180
 gccctgtgtg tgggtggcgc cgcagcagcg cgcgggcgcga ctgcctgcct ggtactcaac 240
 ctcttctgcg cggacctgct cttcactcag gctatccctc tgggtgctggc cgtgcgctgg 300
 actgagcgct ggctgctggg ccccgcttgc tgccacctgc tcttctacgt gatgacctg 360
 agcggcagcg tcaccatcct cacgctggcc gcggctcagc tggagcgcct ggtgtgcac 420
 gtgcacctgc agcgcggcgt gcggggctct gggcggcgcg cgcgggcagc gctgctggcg 480
 ctcatctggg gctattcggc ggtcgcgcgt ctgcctctct cgctctctt ccgagctgtc 540
 ccgcaacggc tcgccggcgc cgaccaggaa atttcgattt gcacctgat ttggccacc 600
 attctggag agatctcgtg ggatgtctct ttgttaact tgaactcttt ggtgccagga 660
 ctggctcatt tgatcagtta ctccaaaatt ttacagatca caaaggcatc aaggaaagg 720
 ctacaggtaa gcctggccta ctcgagagc caccagatcc gcgtgtccca gcaggacttc 780
 cggctctctc gaacctctt cctcctcact gtctccttct tcatcatgtg gaggcccatc 840
 atcatcacca tctcctctcat cctgatccag aacttcaagc aagacctggt catctggcgg 900
 tctcttctct tctgggtggg ggcttcaaca ttgtctaatt cagccctaaa ccccatcctc 960
 tacaaatgta cactgtgcag gaatgagtg aagaaaaatt ttgtgtgct ctggttccca 1020
 gaaaaggagg ccattttaac agacacatct gtcaaaagaa atgacttgct gattatttct 1080
 ggc 1083

<210> 3
 <211> 361
 <212> PRT

<213> Mus musculus

<400> 3

Met Ser Pro Glu Cys Ala Gln Thr Thr Gly Pro Gly Pro Ser His Thr
5 10 15
Leu Asp Gln Val Asn Arg Thr His Phe Pro Phe Phe Ser Asp Val Lys
20 25 30
Gly Asp His Arg Leu Val Leu Ser Val Val Glu Thr Thr Val Leu Gly
35 40 45
Leu Ile Phe Val Val Ser Leu Leu Gly Asn Val Cys Ala Leu Val Leu
50 55 60
Val Ala Arg Arg Arg Arg Arg Gly Ala Thr Ala Ser Leu Val Leu Asn
65 70 75 80
Leu Phe Cys Ala Asp Leu Leu Phe Thr Ser Ala Ile Pro Leu Val Leu
85 90 95
Val Val Arg Trp Thr Glu Ala Trp Leu Leu Gly Pro Val Val Cys His
100 105 110
Leu Leu Phe Tyr Val Met Thr Met Ser Gly Ser Val Thr Ile Leu Thr
115 120 125
Leu Ala Ala Val Ser Leu Glu Arg Met Val Cys Ile Val Arg Leu Arg
130 135 140
Arg Gly Leu Ser Gly Pro Gly Arg Arg Thr Gln Ala Ala Leu Leu Ala
145 150 155 160
Phe Ile Trp Gly Tyr Ser Ala Leu Ala Ala Leu Pro Leu Cys Ile Leu
165 170 175
Phe Arg Val Val Pro Gln Arg Leu Pro Gly Gly Asp Gln Glu Ile Pro
180 185 190
Ile Cys Thr Leu Asp Trp Pro Asn Arg Ile Gly Glu Ile Ser Trp Asp
195 200 205
Val Phe Phe Val Thr Leu Asn Phe Leu Val Pro Gly Leu Val Ile Val
210 215 220
Ile Ser Tyr Ser Lys Ile Leu Gln Ile Thr Lys Ala Ser Arg Lys Arg
225 230 235 240
Leu Thr Leu Ser Leu Ala Tyr Ser Glu Ser His Gln Ile Arg Val Ser
245 250 255
Gln Gln Asp Tyr Arg Leu Phe Arg Thr Leu Phe Leu Leu Met Val Ser
260 265 270
Phe Phe Ile Met Trp Ser Pro Ile Ile Ile Thr Ile Leu Leu Ile Leu
275 280 285
Ile Gln Asn Phe Arg Gln Asp Leu Val Ile Trp Pro Ser Leu Phe Phe
290 295 300
Trp Val Val Ala Phe Thr Phe Ala Asn Ser Ala Leu Asn Pro Ile Leu
305 310 315 320
Tyr Asn Met Ser Leu Phe Arg Asn Glu Trp Arg Lys Ile Phe Cys Cys
325 330 335
Phe Phe Phe Pro Glu Lys Gly Ala Ile Phe Thr Asp Thr Ser Val Arg
340 345 350
Arg Asn Asp Leu Ser Val Ile Ser Ser
355 360

<210> 4

<211> 1083

<212> DNA

<213> Mus musculus

<400> 4

atgtcccttg agtgtgcaca gacgacgggc cctggcccct cgcacaccct ggaccaagtc 60

```

aatgcgcccc acttcccttt cttctcggat gtcaggcgcc accaccgggt ggtgttgagc 120
gtcgtggaga ccaccgtttt ggggtccttc tttgtcgtct cactgctggg caacgtgtgt 180
gctctagtgc tgggtggcgc cgtcggcgc cgtggggcga cagccagcct ggtgctcaac 240
ctcttctcgc cggatttgc tttcaccagc gccatccctc tagtgcctgt cgtgcgtggg 300
actgaggcct ggotgttggt gccctgtctc tgcacactgc tcttctacgt gatgacaatg 360
agcggcagcg tcacgatcct cacactggcc gcggtcagcc tggagcgcct ggtgtgcctc 420
gtgcgcctcc ggcgcggttt gagcggcccg gggcggcgga ctacggcggc actgctggct 480
ttcatatggg gttactcggc gctcggcgc ctgccctctc gcactcttgt ccgcgtggtc 540
ccgcagcgcc ttcccgcggt ggaccaggaa attccgattt gcacattgga ttggcccaac 600
cgcataggag aaatctcatg ggatgtgttt tttgtgactt tgaactctct ggtgcgggga 660
ctggtcattg tgatcagtta ctccaaaatt ttacagatca cgaaagcctc gcggaagagg 720
cttacgctga gcttggcata ctctgagagc caccagatcc gagtgtccca acaagactac 780
cgactcttcc gacgcctctt cctgctcatg gtttccctct tcactatgtg gactccctac 840
atcatcacca tctcctctcat cttgatccaa aacttcgggc aggacctggt catctggcca 900
tccctttttc tctgggttgt ggccttcacg tttgccaaact ctgccctaaa cccatactg 960
tacaacatgt cgtgtgttcag gaacgaatgg aggaagattt tttgtctgct cttttttcca 1020
gagaaggagg ccattttttc agacacgtct gtcaggcgaa atgacttgtc tgttatttcc 1080
agc 1083

```

```

<210> 5
<211> 20
<212> DNA
<213> Artificial Sequence

```

```

<220>
<223> primer

```

```

<400> 5
gctgtggcat gcttttaaac 20

```

```

<210> 6
<211> 20
<212> DNA
<213> Artificial Sequence

```

```

<220>
<223> primer

```

```

<400> 6
cgctgtggat gtctatttgc 20

```

```

<210> 7
<211> 30
<212> DNA
<213> Artificial Sequence

```

```

<220>
<223> primer

```

```

<400> 7
agttcatttc cagtaccctc catcagtggc 30

```

```

<210> 8
<211> 361
<212> PRT
<213> Rattus norvegicus

```

<400> 8

```

Met Ser Pro Glu Cys Ala Gln Thr Thr Gly Pro Gly Pro Ser Arg Thr
      5      10      15
Pro Asp Gln Val Asn Arg Thr His Phe Pro Phe Ser Asp Val Lys
      20      25      30
Gly Asp His Arg Leu Val Leu Ser Val Leu Glu Thr Thr Val Leu Gly
      35      40      45
Leu Ile Phe Val Val Ser Leu Leu Gly Asn Val Cys Ala Leu Val Leu
      50      55      60
Val Val Arg Arg Arg Arg Arg Gly Ala Thr Val Ser Leu Val Leu Asn
      65      70      75      80
Leu Phe Cys Ala Asp Leu Leu Phe Thr Ser Ala Ile Pro Leu Val Leu
      85      90      95
Val Val Arg Trp Thr Glu Ala Trp Leu Leu Gly Pro Val Val Cys His
      100      105      110
Leu Leu Phe Tyr Val Met Thr Met Ser Gly Ser Val Thr Ile Leu Thr
      115      120      125
Leu Ala Ala Val Ser Leu Glu Arg Met Val Cys Ile Val Arg Leu Arg
      130      135      140
Arg Gly Leu Ser Gly Pro Gly Arg Arg Thr Gln Ala Ala Leu Leu Ala
      145      150      155      160
Phe Ile Trp Gly Tyr Ser Ala Leu Ala Ala Leu Pro Leu Cys Ile Leu
      165      170      175
Phe Arg Val Val Pro Gln Arg Leu Pro Gly Gly Asp Gln Glu Ile Pro
      180      185      190
Ile Cys Thr Leu Asp Trp Pro Asn Arg Ile Gly Glu Ile Ser Trp Asp
      195      200      205
Val Phe Phe Val Thr Leu Asn Phe Leu Val Pro Gly Leu Val Ile Val
      210      215      220
Ile Ser Tyr Ser Lys Ile Leu Gln Ile Thr Lys Ala Ser Arg Lys Arg
      225      230      235      240
Leu Thr Leu Ser Leu Ala Tyr Ser Glu Ser His Gln Ile Arg Val Ser
      245      250      255
Gln Gln Asp Tyr Arg Leu Phe Arg Thr Leu Phe Leu Leu Met Val Ser
      260      265      270
Phe Phe Ile Met Trp Ser Pro Ile Ile Ile Thr Ile Leu Leu Ile Leu
      275      280      285
Ile Gln Asn Phe Arg Gln Asp Leu Val Ile Trp Pro Ser Leu Phe Phe
      290      295      300
Trp Val Val Ala Phe Thr Phe Ala Asn Ser Ala Leu Asn Pro Ile Leu
      305      310      315      320
Tyr Asn Met Ser Leu Phe Arg Ser Glu Trp Arg Lys Ile Phe Cys Cys
      325      330      335
Phe Phe Phe Pro Glu Lys Gly Ala Ile Phe Thr Glu Thr Ser Ile Arg
      340      345      350
Arg Asn Asp Leu Ser Val Ile Ser Thr
      355      360

```

<210> 9

<211> 1083

<212> DNA

<213> Rattus norvegicus

<400> 9

```

atgtcccttg agtggtgcga gacgacgggc cctggcccct cgcgcacccc ggaccaagtc    60
aatcgacccc acttcccttt cttctcggat gtcaagggcg accacgggct ggtgctgagc    120
gtcctggaga ccaccgttct gggactcatt ttgtggtct cactgctggg caacgtgtgt    180

```

gcctcgtgtgc	tggtgtgtgtgc	cgtcgggcgc	cgtggggcga	cagtcagett	ggtgetcaac	240
ctcttctcgg	cggattttgct	cttcaccagc	gccateccctc	tagtgctcgt	ggtgcgctgg	300
actgaagcct	gggtcgtcggg	gcccgtcgtc	tgccacctgc	tcttctacgt	gatgaccatg	360
agcggcagcg	tcacgatcct	cacgctggcc	cgggtcagcc	tggagcgcat	ggtgtgcctc	420
gtgcgcctgc	ggcgcggctt	gagcggcccg	ggcggcgga	cgcaggcgcc	gctgctggct	480
ttcatatggg	gttactcggc	gctcgcgcgc	ctgccctctc	gcattcttgt	ccgcgtggtc	540
ccgcagcgcc	ttcccggcgg	ggaccaggaa	attccgattt	gcacattgga	ttggcccaac	600
cgcataggag	aaatctcatg	ggatgtgttt	tttgtgactt	tgaacttcct	ggtaccaggga	660
ctggtcattg	tgatcagcta	ctccaagatt	ttacagatca	cgaagccctc	gcgggaagg	720
cttacgctga	gcttggccta	ctccgagagc	caccagatcc	gagtgctcca	gcaggactac	780
cggctcttcc	gaacgctctt	cctgctcatg	gtttccttct	tcacatgtgt	gagtcaccac	840
atcatcacca	tcctcctcat	cttgatccag	aacttcgcgc	aggacctggt	tatctggccg	900
tcctttttct	tctgggtggt	ggccttcacg	tttgccaaact	ccgcccataa	ccccattctg	960
tacaacatgt	cgtgtgttcag	gagcgagtgg	aggaagattt	tttgcgtcct	ctttttccca	1020
gagaaggagg	ccattttttac	agaaacgtct	atcaggcgaa	atgacttgtc	tgttattttc	1080
acc						1083

<210> 10
 <211> 19
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> primer

<400> 10
 gtgggtggcct tcacgtttg 19

<210> 11
 <211> 19
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> primer

<400> 11
 cgctcctgaa cagcgacat 19

<210> 12
 <211> 26
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> probe

<400> 12
 caactccgcc ctaaacccca ttctgt 26

<210> 13
 <211> 33
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> primer

```

<400> 13
gtcgacatgt cccctgagtg tgcgcagacg acg      33

<210> 14
<211> 33
<212> DNA
<213> Artificial Sequence

<220>
<223> primer

<400> 14
gctagcttag gtggaaataa cagacaagtc att      33

<210> 15
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> primer

<400> 15
tccgagtgtc ccaacaagac tac                  23

<210> 16
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> primer

<400> 16
gactccacat gatgaagaag gaaa                  24

<210> 17
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> probe

<400> 17
ccgcacgctc ttcttgctca tg                  22

<210> 18
<211> 19
<212> DNA
<213> Artificial Sequence

<220>
<223> primer

<400> 18

```

```

gtggtggcct tcacgtttg                                19
<210> 19
<211> 19
<212> DNA
<213> Artificial Sequence

<220>
<223> primer

<400> 19
cgctcctgaa cagcgacat                                19

<210> 20
<211> 26
<212> DNA
<213> Artificial Sequence

<220>
<223> probe

<400> 20
caactccgcc ctaaacccca ttctgt                        26

<210> 21
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<221> misc_DNA
<222> (20)..(21)
<223> mixed DNA/RNA n stands for deoxy thymidine

<400> 21
ggaccaggaa auuccgauun n                              21

<210> 22
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<221> misc_DNA
<222> (1)..(2)
<223> mixed DNA/RNA n stands for deoxy thymidine

<400> 22
nnccuggucc uuuaaggcua a                              21

```